BRUHAT BANGALORE MAHANAGARA PALIKE
RAJARAJESHWARINAGAR ZONE
ELECTRICAL DIVISION
DETAILED ESTIMATE FOR PUBLIC WORKS

Name of the Work: providing M & R to Electrical installations @ JP Park in ward No 17 of RR Nagar

Est. No.AEE/ELE/RRNZ/ EST/ / 12-13				Work Code:			Est Amount: 500000.00
Sl No	SR ref		Description of Work	unit	Qty	Rate	Amount
	page	sl no					
1	xxxxx	37	Annual Electrical Maintenance of Electrical instllations a) Licenced Electric Wireman fitter with tools Rs 184.74 per day per person Rs 1184.74X30 days = Rs 5542.20 per person per month Rs 5542.2X12 Months Rs 66506.40 per person per year (One Wireman per Shift for 2 Shifts /day)	Each	1	66506.4	66506.40
2	xxxxx	124	b) Electrical Helper Rs 184.74 per day per person Rs 1184.74X30 days = Rs 5542.20 per person per month Rs 5542.2X12 Months Rs 66506.40 per person per year (One helper per Shift for 2 Shifts /day)	Each	1	66506.4	66506.40
3	**2**	**1**	Open Conduit Systeme: Supplying heavy gauge PVC conditpipe,,,,,,,,,,, dia confirming to IS 2509 with suitable size bends,junction boxes, adhesibve paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall stone structure or plug incase of brick walls and cement plastering damaged portionusing heavy gauge saddles at an interval of 700mm using NF screws.				
		a	19/20mm dia 2mm thick	Per Mtr	50	37.00	1850.00
		b	25mm dia 2mm thick	Per Mtr	25	45.00	1125.00
4	**6**	**14**	Supply and fixing of backlite D.P/Socket/switch with/without neon indicator over existing wood board or flush mounting in plastic plates/nitches.				
		I	**Using Group 'A' Material.**				
		a	32Amps Flush/projecte type DP switch	Each	10	145.00	1450.00
		c	16Amps Flush type Univerals socket	Each	5	95.00	475.00
5	**9**	**20**	Wiring for lighting/power circuit using one of PVC insulated 11oov grad, multis and **copper** conductor single core cable in open or consealed system of wiring.				
		I	**I Group A Materials.**				
		b	1.5 sqmm	Per Mtr.	250	15.00	3750.00
		c	2.5 sqmm	Per Mtr.	500	25.00	12500.00
		d	4 sqmm	Per Mtr.	100	32.00	3200.00
		e	6 sqmm	Per Mtr.	25	52.00	1300.00

AEE (Elg.)

Sl No	SR ref page	SR ref sl no	Description of Work	unit	Qty	Rate	Amount
6	10	23	Supplying and fixing hylum brand hand plastic sheet 3mm thick with necessary nitches for fixing switches, regulators etc., and fixing on existing wood or metal box using N.F. screws.	SqCm	10000	0.20	2000.00
7	10	24	Supplying and fixing of PVC casing and capping on the wall or ceiling using necessary materials like bends, screws at an interval of 300mm... etc as required.				
		a	20mm Dia	Mtr	25	36.00	900.00
		b	25mm Dia	Mtr	15	41.00	615.00
8	10	25	Supplying PVC/GI flexible conduit pipe...mm dia fixing on surface over inverted tapered wooden plugs or phill plugs or rawl plugs and clamped using heavy guage saddles at an interval of 300mm using NF screws and the either end of the pipe terminated completely.				
	11						
		a	20mm	Mtr	50	45.00	2250.00
9	36	12	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and C type curve indicator ON/OFF Energy cross 3 with short circuit breaking capacity of 10K and complete wiring as required.				
		A)	5-32Amps Sp				
		1	Group ' A'	Each	20	195.00	3900.00
		C)	**5-32Amps DP**				
		1	Group ' A'	Each	10	510.00	5100.00
		D)	**40-63Amps DP**				
		1	Group ' A'	Each	5	815.00	4075.00
		E)	**5-32Amps TPN**				
		1	1. Group 'A'	Each	3	1005.00	3015.00
		F)	**40-63Amps TPN**				
		1	1. Group 'A'	Each	3	1495.00	4485.00
10	41	37	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. And M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.				
		a	40x40x6mm	RMtr	8	240.00	1920.00
11	41	38	Fabricating supplying and mounting MS box made out... SWG suitable lfor floor/wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size cdlamps with mecessary cable entry pipe with gland and box should be finished with 2 cdoats of red oxide primer paint and finally finished with approved colour enameled metal pain etc., complete.				
		b	16SWG	SQ CM	20000	0.33	6600.00

AEE (Elc)

Sl No	SR ref page	SR ref sl no	Description of Work	unit	Qty	Rate	Amount
12	42	39	Supply and installaion / Fixing / Provision for mounting of HRC Fuse/ MCB with suitable connector/ terminal for 3 Ph / 1 Ph connections with Loop-In & Loop-Out terminals for 10 SQmm/25 Sqmm 3.5 C Al/ Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof having internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and / or grommets.				
		a	200x200x98mm	Each	10	925.00	9250.00
13	42	41	Supplying and fixing of metal socket set of 2pole and earth plugs and socket for incorporating SP and TP MCB 9Without MCB). The entire plug and socket shall be mounted in a powder coated metal box & wired completely				
		A)	SP & N				
		b	20 Amps	Each	3	785.00	2355.00
	47	21	**Supply of Special type lamps**				
		g	18 Watts CFL	No	50	180.00	9000.00
14	47	26	Supply of 1x19x1000mm self adhesive Pvc insulated steel grip tape roll.	No	50	15.00	750.00
15	47	27	Supplying and replacing PVC flexible copper wire of approved make in place of deteriorated wire.				
		d	23/0.0060"	RMt	50	8.00	400.00
16		28	Supplying and drawing PVC flexible unarmoured copper control cable of approved make				
		B	**3c x 2.5Sqmm**				
		1	Group A	RMt	50	129.00	6450.00
17	50	34	Supplying and fixing/replacing of 6/32Amps electrical accessories on existing wittch board.				
		a	6Amps SP Switch	No	25	31.00	775.00
		c	6Amps 3 Way 5 Pin Socket	No	25	41.00	1025.00
		d	6Amps 3 pin Top	No	15	40.00	600.00
		f	6 Amps lamps holder	No	50	38.00	1900.00
		i	16 Amps SP Switch	No	10	80.00	800.00
		j	16 Amps 3 way 5 pin socket	No	10	84.00	840.00
		k	16 Amps 3 pin top	No	10	72.00	720.00
18	51	35	Supplying and fixing/replacing condenser for ceiling gan/MV/SV/MH and other luminaries.				
		b	8mfd	No	15	97.00	1455.00
19	52	46	Supply and fixing/replacing of choke for Mercury Vapour lamp fitting in existing fitting mounted on trbular pole.				
		a	**125 Watts**				
		1	Group A	No	25	506.00	12650.00
20	53	47	Supply and fixing of 70Watts heavy duty open construcion ferromagnetic copper ballast for HPSV/HPMH lamps				
		b	**150Watts**				
		1	Group A	No	10	924.00	9240.00

AEE (Elc.)

Sl No	SR ref page	SR ref sl no	Description of Work	unit	Qty	Rate	Amount
21	53	49	Supplying and fixing MV lamps on existing fitting mounted on tubular pole.				
		b	125Watts	No	25	205.00	5125.00
22	53	51	Supplying and fixing of HPMH lamps on existing fitting mounted on tublar pole.				
		I	I Single end				
		a	70 to 150Watts	No	10	780.00	7800.00
23	54	54	Supply and fixing of of 230 volts CFL lamp holder				
		a	2Pin Holder	No	50	50.00	2500.00
24	54	55	Supply and fixing of of 230 volts Porocelain holder fof MV/SV/MH lamp				
		a	70-150Watts lamp Holder	No	25	74.00	1850.00
25	54	56	Supply and fixing of of 230 volts CFL lamp starter base	No	25	16.00	400.00
26	55	63	Painting of existing street light pole after scrapping the old paint and painted with suitable colour enamel/Silver paint including coping/footing of the pole.				
		a	Upto 5Mtr street light pole.	No	100	260.00	26000.00
27	55	64	Supplying, fixing/replacing of igniter suitable for 70 to 400 W SV/MH Street light fitting.				
		a	Group A	Each	20	525.00	10500.00
28	68	1	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipments on the meter board using 40mm dia 2.90 thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proprotion of salt and charcoal 150mm alround the pipe to complete depth. the connection form the pipe to the conduit etc, is to be established through GI wire of size as oer ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and checknuts etc, the pipe shall have 16 through holes of 12mm dia.	Each	4	1950.00	7800.00
29	68	4	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanised, steel wire/steel tap armoured cable with PVC outer sheathing 1.1 KV class				
		d	4 core 16 sqmm	Per Mtr	400	150.00	60000.00
		e	3.5 core 25 sqmm	Per Mtr	150	215.00	32250.00
		f	3.5 core 35 sqmm	Per Mtr	50	250.00	12500.00
		g	3.5 core 50 sqmm	Per Mtr	25	340.00	8500.00
30	69	5	Labour charges for laying of 1.1KV class UG calbe when supplied agency in existing trench GI pipe/ stpnewre pip / on wall / on pole as required.				
		I	**In exixting trench/duct.**				
		a	6 sqmm to 16 sqmm	Rmtr.	400	8.00	3200.00
		b	25 sqmm to 75 sqmm	Rmtr.	225	11.00	2475.00
31	70	6	Digging of trench of 0.6m deep x 0.50 mtr wide refiling the trench to the required ground level and consolidating etc., Complete. (As per Civil SR KSRB 1-2, P-7)				
		a	In soil (ordinary)	Rmtr	525	40.00	21000.00
		e	CC Cutting		30	140.00	4200.00

AEE (Elec.)

(3)

Sl No	SR ref page	SR ref sl no	Description of Work	unit	Qty	Rate	Amount
32	70	9	Supplying and fixing of class A (medium duty) GI pipe of wall thick ness not less than 3.25mm pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class.				
		a	40mm	Rmtr	10	240.00	2400.00
		b	50mm	Rmtr	5	260.00	1300.00
33	71	12	Supplying and making straight through cable joint with epoxy resin including farrules and other jointing matrials for PVC insulated and PVC sheathed steel tape, wire armoured aluminium conductor cable of 1.1 KV grade of the following sizes.				
		b	3 1/2x16 sqmm	Per Kit	20	960.00	19200.00
		c	3 1/2x 35 sqmm	Per Kit	5	1020.00	5100.00
		d	3 1/2x50 sqmm	Per Kit	3	1210.00	3630.00
34	75	23	Supplying and running GI/Copper conductor for grounding and (along with other wires in conduit system of wiring) using necessary suitable size clamps, nails, guttas/ spaceris etc.,				
		I	**GI wire**				
		c	8 SWG	Per Mtr	20	20.00	400.00
35		KPWD civil SR	KSRB 4-1.5 : Providing and laying in position plain cement concrete of mix 1:1.5:3 using 20mm and down size graded granite metal, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (Cooping to MS pole each 3.142x0.15x0.15x0.9 = 0..0636cmtr.)	cum	3	3,079.00	9237.00
			Miscellanious & round off				900.20
			Total				**500000.00**

1) Certified that,the work spot has been inspected by me & prepared the estimate in most economical way of executing the work.

2.) The Provisions made in the estimate are adequate and are necessary.

3.) The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.

4.) The rates in the Estimate is based on the KPWD (Elect) SR 2010- 11 And Approved rates

Junior Engineer(Electrical)
RR Nagar Zone
BBMP

Assistant Executive Engineer(Elect)
Rajarajeshwarinagar Range
BBMP

Executive Engineer(Elect)
RR Nagar Zone
BBMP

ADMINISTRATIVE APPROVED

Rs : Five lakh only.
.....is accorded
under the head : P0298.
.....
By AC (R.R.N.) : 1447/12-13
Vide Register Page No. 16 & 17 - subject
to conditions contained in inclosed memo
No. : 1447/12-13 Date : 13/2/2013.

TA AC (R.R.N.)

Technically Sanctioned for Rs. 5,00,000-00
Rs. Five lakh only.
.....is accorded
under the head. P0298
.....
By EE (Elect) RRN/ 66/12-13
Registered as R.R.N. No 28 & 29 Subject
to conditions contained in enclosed memo
No. 66/12-13 Date 18/2/2013

AE, (Elect) RRN EE, (Elect) RRN